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Conference Abstract

The Freshwater Information Platform: An online network supporting freshwater biodiversity research and data publishing

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Abstract

Species distribution data are crucial for understanding biodiversity dynamics and the underlying drivers. For freshwaters, which cover only a small proportion of the world's surface, but host a large variety of species, knowledge on species occurrences is extremely important as they are among the most endangered ecosystems globally. However, a huge body of data gathered by scientists and water managers is currently difficult to access: systematic data publishing practices have not been fully adopted yet and data embedded in scientific papers and research project websites are often challenging to extract. At the same time, data and knowledge generated through publically-funded research or monitoring programmes are considered a common good.

The Freshwater Information Platform (FIP) aims at pooling freshwater related research information from multiple projects and initiatives to make it easily accessible for scientists, water managers, conservationists and the interested public. The FIP consists of several

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major components, three of which form its “data publication unit”: The Freshwater Metadatabase (1) is an online tool where data characterising and documenting actual datasets can be entered in a simple way. With one more mouseclick these metadata can then be published as open access articles in the connected Freshwater Metadata Journal. The second part of the unit is the Freshwater Biodiversity Data Portal (2), where we aim to mobilise and publish the connected freshwater biodiversity data (occurrence records) through GBIF (Global Biodiversity Information Facility). The use of collected datasets for large-scale analyses and models is demonstrated in the Global Freshwater Biodiversity Atlas (3) that publishes interactive online maps featuring research results on freshwater biodiversity, threats and conservation priorities.

Here, we focus on introducing these components as tools to streamline open access freshwater data publication, arguing it will improve the capacity to protect and manage freshwater biodiversity in the face of global change. We further present linkages to and cooperations with other key initiatives in the field, namely the "Alliance for Freshwater Life" as well as "FreshwaterBON".

Keywords

inland waters, knowledge base, open access, (meta-)data publishing, tools, science support, policy support

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